

The Tech



NEWSPAPER OF THE UNDERGRADUATES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOL. LXXIX NO. 3

CAMBRIDGE, MASSACHUSETTS, FRIDAY, FEBRUARY 20, 1959

5 CENTS

Prof. Edgerton to Receive Scroll Named Outstanding NE Engineer

Tuesday, February 24, Dr. Harold E. Edgerton, professor of Electrical Engineering at MIT, will be named outstanding New England engineer for 1958. John C. Hitt, past president of the Engineering Societies of New England, will present a scroll to Dr. Edgerton at a luncheon to be held by the ESNE in Memorial Hall, Harvard University. James Adam, Jr., present president of ESNE, announced that the document citing Dr. Edgerton for his outstanding achievements and character is a feature of National Engineer's Week.

Dr. Charles S. Draper, head of the Department of Aeronautics and Astronautics and director of the Instrumentation Laboratory at MIT, will be the principal speaker at the luncheon. Leslie J. Weed will preside at the dinner, which is part of an all-day meeting presented by the National Society of Professional Engineers at the Hotel Commander and Sanders Theatre.

Dr. Edgerton, who has made pictures of humming birds, H-bomb explosions, and creatures living four miles under the sea, was selected by a committee made up of the executive officers of the fifteen societies of the Engineering Societies of New England. Factors that resulted in his selection by this committee were his development of the stroboscope and related electronic flash equipment. These devices are used extensively in science to gather factual data concerning rapidly moving objects.

Born in Fremont, Nebraska, in 1903, Dr. Edgerton graduated from the University of Nebraska in 1925 and worked at the testing laboratories of General Electric before entering MIT in 1926. Dr. Edgerton received a S.M. and Ph.D. from MIT and was made a full professor in 1948.

Dr. Edgerton is chairman of the board and president of Edgerton, Germeshausen and Grier, a Boston firm which has been engaged in extensive research and development, including the equipment used in photographing nuclear tests. He has experimented with stroboscopic lights visible for fifty miles and has developed a system of photographing shock waves in day light. In recent years Dr. Edgerton has helped develop photographic equipment used for studying sea life at extreme depths.

Dr. Edgerton has received innumerable awards including an honorary Master of Photography degree from the Photographers' Association of America. He is co-author, with Dr. James R. Killian, Jr., of *Flash, Seeing the Unseen with High-speed Photography*. He is a fellow of the American Institute of Electrical Engineers, the Institute of Radio Engineers, and Eta Kappa Nu.

Freshmen Given Opportunity for Individual Work in Science Fields

Freshmen have been offered the opportunity to work closely with distinguished men in the field of science on projects of their own choosing. A considerable number of faculty members have volunteered their time and have suggested a field in which they are prepared to supervise independent investigation by a freshman. Due to space limitations and other reasons many faculty members are able to supervise only one freshman. Arrangements will thus be made on a first come, first served basis.

The program is experimental, and will probably be enlarged if well received by the MIT student. It arose from two reports, one by Dr. Edwin H. Land in the 1957 Arthur D. Little Memorial Lecture and the other by the 1957 Student Environment Conference. Both pointed out the need for increased individual contact between teachers and students, particularly in the early years of the students' MIT experience.

UAP Hopefuls Elected Tuesday, Candidates Get WTBS Interview



DICK OELER '60



MIKE PADLIPSKY '60



CHRIS SPRAGUE '60

MIT students will have their chance to elect the Undergraduate Association President next Tuesday, February 24, by voting in the lobbies of Buildings Two and Ten. UAP elections will run from 8:45 a.m. to 5:15

p.m. Voters must present their Student Registration Cards in order to vote. All three candidates will be interviewed on WTBS Monday night (management of WTBS regrets that it lacks the facilities to interview Al (Albert P.) Gasser, who is a real cat).

ORGAN RECITAL

Lee Howard of New Haven, Conn., will give a free organ recital in the MIT Chapel on Sunday, February 15 at 4 p.m. A graduate of the Yale School of Music, Mr. Howard is now director of the Neighborhood Music School and organist at St. Paul's Episcopal Church in New Haven.

OPEN HOUSE

The date for MIT's bi-annual Open House has been set. The Institute will be host to its neighbors on Saturday, May 2. A student committee is being set up with Dave Butterfield '60 and Linda Greiner '60 as co-chairmen. Dean Robert Holden will head up the joint faculty administration, student committee.

As in the past, the Open House will try to give visitors a look at the many facets of the Institute—student activities as well as department work, but it is the hope of the committee to have the students participate more in the preparations for the Open House.

WTBS Selects Managing Board

At a combined Managing Board and Associate Board meeting on Wednesday night, WTBS, the campus radio station, elected its Managing Board for the coming year. Addison Bail '60 will serve as Station Manager; Ken Myers '60 as Business Manager; Buck Rogers '61 as Program Manager; John Meng '60 as Technical Manager; and Linda Greiner '60 as Assistant Station Manager.

It was also announced at the meeting that WTBS will hold a personnel drive on Saturday afternoon. The studios in the basement of Ware dormitory will be open all Saturday afternoon and members of the station will be on hand to answer questions.

Tech Industrial Management Men Elect Their Officers

The MIT Industrial Management Association met on Tuesday, February 17, to elect its Executive Committee for the coming year. Those elected were: Gerry Diamond '60, President; Don Rubovitz '60, Vice President; Ralph Buncher '60, Treasurer; Bill Strauss '61, Secretary; Lee Alter '60, Program Chairman; Bob Spivok '61, Membership Chairman; Alan Loss '62, Member at Large. Al Bloom '60, out-going President of the I.M.A. will also serve on the Executive Committee.

It was announced that the I.M.A. would hold the second of its Sherry Hours on Thursday. At this time, two movies will be shown.

Coming up on the program for the I.M.A. is a speech by Prof. Van Alan Clark, former Assistant Dean of the School of Industrial Management. He will speak at 7:30 in Building 52 next Wednesday evening on the "Transformation from Graduate to Young Executive."

Dean Thomas P. Pitre, Associate Dean of Students and Mr. Harvey Burstein, Security Officer, will attend a two-day meeting of business officials of the Eastern Association of Colleges next week in New York City. Dean Pitre will moderate a discussion on the Federal Education Bill and Mr. Burstein will talk on university parking problems.

Deans Fassett and Rule Speak At Grad House Pledge Banquet



Dean Fassett on "Let us rejoice while we are young."

A fraternity pledge banquet, attended by some 100 pledges and new activities, was held recently in the Graduate House dining room and was highlighted by talks by Deans Frederick G. Fassett and John T. Rule.

The theme of the event, as outlined by Mr. Joseph Vittek, Sigma Phi Epsilon, who acted as master of ceremonies, was to foster unity among freshmen of the campus fraternities soon after the freshmen come to MIT rather than later, during the sophomore or junior years as has been the case in the past.

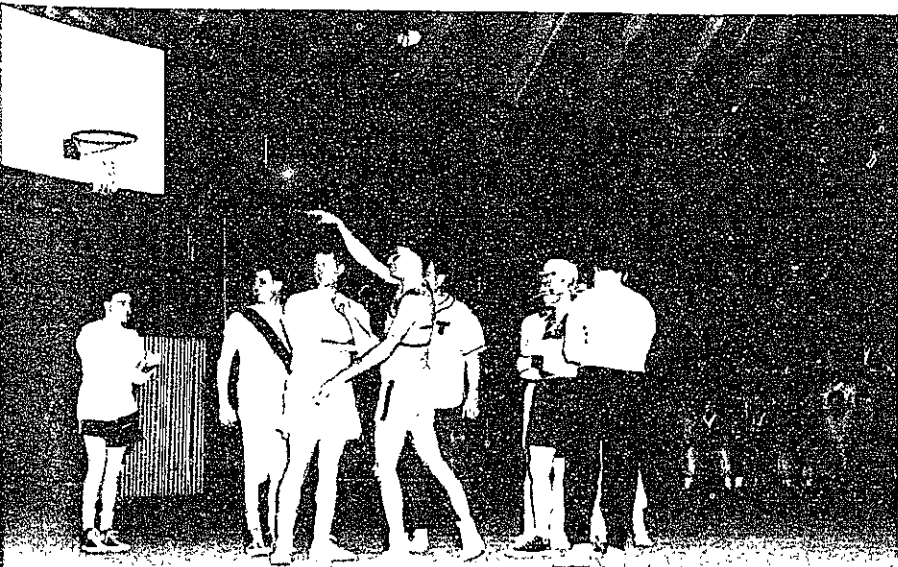
After a few words from Dean Rule, Dean Fassett, who was the featured speaker of the evening, spoke with the general theme as his base, gau-

deamus igitur, (let us rejoice while we are young).

Attendance was limited to only a third of the fraternity pledges since there were conflicting schedules existing among several of the houses. Initiations for the most part were held on Saturday, but several fraternities planned Sunday programs and were unable to add their representation to the thirteen houses already present.

The banquet was initiated by Sigma Phi Epsilon and it is hoped that the affair will be carried on, becoming an annual means of fostering better relations among freshmen fraternity members.

And Even Funnier This Year ...



Irving Bartlett of the Science and Humanities team throws it gently and smoothly—demonstrating the form which he will again display at the annual Basketball game coming Saturday night at Rockwell Cage. The fun begins at 7:45.

The Tech



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Bright New Orientation

Ever since we can remember, members of the Institute community, from students to high administration officials, have been talking about Freshmen orientation. The problem has been, "How do we keep the incoming student, who is afire with scientific enthusiasm, still burning after a few weeks of basic subjects." Until this week, no significant and concrete plans had evolved.

This week, however, all freshmen received an invitation to participate in a program of deep and far-reaching possibilities. They were invited to take part in an experimental project of their own, working directly under and with well-known faculty members. This, we believe, is the start of a new and exciting concept of "orientation." The idea was born with the 1957 Arthur D. Little lecture by Dr. Edwin H. Land. His idea was a new type of university; one where students would have virtually free reign to put their imaginativeness and scientific potential to use.

The new program for freshmen contains one of Land's basic precepts: personal contact with science and its leaders is a far superior way to show a student the vastness of his studies and his own value as a part of scientific advancement than formal pedagogical instruction. It is, in short, meaningful orientation.

The success or failure of this experiment now rests in hands of those men with whom the freshman will be working. We hope that they fully realize the importance of the program and will devote sufficient time and interest to it.

We congratulate the Freshman Advisory Council and other administration and faculty members involved on taking this significant step. We hope that the experiment will be successful; perhaps even pointing the way to a new concept of the technological education.

Names and Statements

Due to a misplaced line of type at the printer's, a rather confusing situation regarding the campaign statements and their authors resulted in the last issue. The signing should have been: Richard H. Oeler for the first statement; Michael A. Padlipsky, the second; and Christopher R. Sprague for the last. We apologize. Ed.

letters

To the Editor:

When in the course of history, it is necessary for a leader to take in his hands the destinies of the people, represent them, their interests, their claims, it is of utmost concern for the success of the enterprises to have the approval of the subjects or, at least, their interest. Any action taken in the name of the people without their awareness tends to be a personal deed, a selfish or illusive decision, carrying very little of the strength the leader falsely advertises.

The political level of the student body at MIT is far from being as low as some candidates to the UAP seem to believe. If there isn't much interest from this same student body in the activities of a minority of puffed up candidates and "rulers", the reason lies in the candidates' outstanding ability to be uninteresting. This is not a generality and fortunately we have, among the student government, representatives concerned with the problems they can and are allowed to solve. Let us not fool ourselves: MIT is mainly an educational Institute, involved in enormous conflicts of money and industry interests, and the undergraduate contribution is not vital to the continuation of its machinery. Although the students tend to criticize and condemn its policy towards individuals we should be aware of the benefits we get from studying (at the upper levels) with the best brains in the country, and though we pay a high price for these benefits, they are a favor, not an obligation.

By carefully reading the President's report, by talking to members of the staff, I am more and more convinced that MIT could survive, and eliminate a number of problems, by having only a Graduate School and Research Departments. Of course this is not and never was taken into consideration and from year to year the Undergraduate School is improved in the best way it can. But MIT is NOT a club organized by neighbors, or an association put up by similar interests, and therefore cannot consider Student Govern-

ment as a rule, but only as an activity, like Squash. It is true that we in the Undergraduate body have our problems: bad instructors in the first year, loss of personality in the following ones, very high pressure, failing grading system, etc. But all of these problems can be solved individually (change of sections, off-campus apartments, sleeping pills, psychology of instructors, etc.) or by *serious* representation to the Administration. However this can certainly not be solved by private prideful satisfactions, as in the case of Mr. Padlipsky. Personal accomplishment, vanity and hot plates are very poor reasons for being elected. Rather than spending one's time writing "threatening" (?) letters and other statements, it is more important to have a real reason to be elected. Whether the candidates criticized in this newspaper have a better chance or not is of little weight in such a matter: I believe that the student who votes is master of his own mind, and the candidate's letters or even this comment should only be a better way to understand what is involved, and never an advice or a decisive influence.

What cannot continue is the foolish illusion that the UAP is the representative of the student body, because we all know how the elections are carried on: we vote for fun, never with any idea of defending our interests. Contrary to the Baker House candidate, our activities, academic and athletic records do not qualify us to represent the opinion of the whole student body, but only our own, and as such we'd like to say it: if you are going to vote, do it for the best candidate, not for the best friend. If your best friend is running but is not the best candidate, or if none of them is worth stopping for at the booth, do them, do us, the favor: do not vote.

Hot plates and parking space have their reasons and obstacles and the Administration is certainly not trying to make extra-curricular matters harder for us in the face of the already hard curriculum. "To vote is to be responsible for one's opinion: for or against, but responsible."

Jean Pierre Frankenhuis '61

To the Editor, *The Tech*:

I was most pleased to see from your Editorial Page that I have managed to wake at least one member of the student body from his "dogmatic slumber". It is most unfortunate that he only said, in essence, "Shut up and let me go back to sleep." Before proceeding to a point-by-point examination of his charges, I should like to attempt to give him some nightmares. I quote without further comment from the 1956-57 MIT Catalogue: "All student activities are supervised by the Institute Committee, on legislative and judicial body of the MIT Undergraduate Association. On this Committee sit elected representatives of the four classes, of the dormitories, the fraternities, and commuters. The full Committee meets regularly to consider all matters pertaining to undergraduate affairs. It has jurisdiction over all undergraduate organizations." (P. 38.) In the 1958-59 issue, we find only: "The Institute's purpose is to provide maximum opportunity—consistent with MIT's educational aims—for students through their elected student government to regulate their own day-to-day affairs, activities, including athletics." (P. 26.)

I shall consider here only six of Mr. Maslanka's mistakes. 1) I do *not* state that the cause of the student government problem is the fact that the environment of the MIT student is being changed. This is clearly stated as the symptom, not the infection. 2) The fourth paragraph of the cut version of my open letter which appeared in your February 17 issue contains the answer to the charge that I fail to define what I mean by rights and privileges. Apparently a simple statement is not complex enough to be a definition. 3) The contentions that the only right we have "is to pay specified amounts of money to the Institute at specified times" and that "the students, who are the inferiors, can approach the Institute, which is the superior, only in a suppliant manner" (which has nothing to do with what I was saying in my letter except for the use of a couple of the same words)—both fill me with horror. "Not all are free who mock their chains." I suppose that now I'll have to change my name to Spartacus and fight slave mentality too. 4) At the beginning of Mr. Maslanka's letter I didn't even know what "rights and privileges" were; by his sixth paragraph "Mr. Padlipsky confuses privileges extended by the Institute with rights." A grammatical monster, but a very good trick. 5) I say that students' rights and privileges can be *regained and retained* by legislation if we may, by bargaining if we must. This seems perfectly clear in meaning; I fail to understand what "legislating against the Institute" (Maslanka's phrase) means, surely I never used the phrase. 6) Finally, an elaborate theory of student apathy (which I sincerely hope is untrue, as it requires votes, which require voters, to win an election—and this is what I hope to do)—which theory is based upon an egregious misquotation. I said that I want to "get the *student* back in 'student' government." It is not at all "obvious that the students hold the offices in student government." It *has* been said that "little deans" hold the offices in student government . . .

The problem, then, is a very real one. I believe that my solution is the only one offered that will work. I assume that Mr. Maslanka will now either vote for me, or go back to sleep and not vote at all. I would prefer the former.

Michael A. Padlipsky '60

reviews

The Horse's Mouth

The Horse's Mouth is another Guinness picture. Adding to his already ordinary career personifying the strangest characters and the more ones, Alec Guinness gives a wonderful performance of wit, sadness, genius, martyrdom, incoherence; all this blended with art and ale. "Horse's Mouth" is the hilarious story of an artist, misunderstood everybody, but faithful, courageous and strong-minded. His ideal is not success or renown, but the achievement of his intellectual necessity; completion of his form of expression. For this the artist needs a wall, an gigantic, unlimited wall and the story concentrates on this search. But the simple material, the artist needs the inspiration, and when it is taken by a fever of creation which stops at no social, religious, educational human obstacle. The floor may open under his feet (and it does), the wall may be destroyed (and they are), but the painting will be achieved. Whether it remains or not is of little concern to the artist, for once it has been done it can destroy it in his own mind.

As more than often happens in the Guinness pictures, the story is already worth going to see, but the directors are not satisfied with it, and in touches of riotous extra comedy, pin-pointed characters, plastic elegance and perfection of style. It is rather strange to see how much of Guinness's personality is transmitted to his directors and we cannot remember any picture (English, that is) having failed in any of the cinematographic genres, having such a great talent as its star. The contrast is more apparent when we remember "The Bridge on the River Kwai," certainly interesting in good quality, but lacking the plastic language, the British "finesse", the direction, the colorful interpretations which distinguish any Island picture starring Alec Guinness. While the "Bridge" was a typical adventure-type, straight-forward, and taking most of its success from the story itself, of course, from the characterization of the English officer, the "Ladykillers", "Passport to Pimlico", the "Horse's Mouth" are slices of a delightful detail being of great importance, not for the understanding, but for the entertainment.

The Alec Guinness achievement is the Charlie Chaplin achievement: standing performances, good all-around, but most of all, performance on work, hard work, and observation. Like Chaplin, Alec Guinness is an amateur, coming from a good dramatic school, with a bit of a sexual appeal and a lot of publicity and personal characteristics built in for money. Both men are professional in the best sense of the word, because they have achieved success and quality by working, by producing, by showing what they could do on the screen, not what they were doing in some Las Vegas night club.

Whenever the occasion comes it is a pleasure to recommend a picture. Alec Guinness and the "Horse's Mouth" is no exception. Go to see it, for true art.

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Explosives, Gaming In Uncertain Position; Carnival Deadline Nears

Alpha Phi Omega reminds all living groups that the deadline for booth registration and payment of the five dollar deposit for the All Tech Spring Carnival is February 28, 1959. The five dollar deposit will be

returned out of the first five dollars the individual booth takes in, and each booth will be allowed to keep 1/3 of its gross. A mammoth Grand Trophy will be awarded to the top booth on the basis of proceeds.

To assign suitable locations for the booths APO must know the nature and size of each, although this information will be kept strictly confidential. APO will try to supply electricity if the amount of power needed is specified on the Booth Registration. The Institute has specified that no explosives or large amounts of any liquid be used in any booth, and the Massachusetts Gaming Laws will also be in effect. Adequate police protection will be provided. Any additional information can be gleaned from members of the Clearing House Committee.

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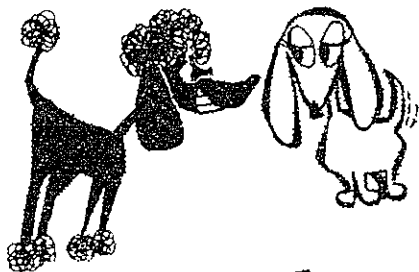
Varsity Lacrosse organizational meeting Tuesday, February 17, 5:00 p.m. at Briggs Field House.

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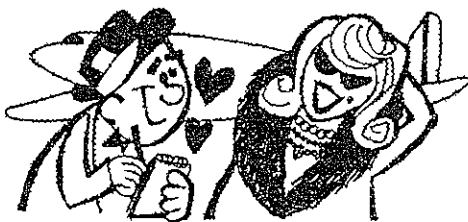
English: CANINE CASANOVA



Thinklish: WOODLE

WITH THE ARION SANTA MONICA CITY COLL

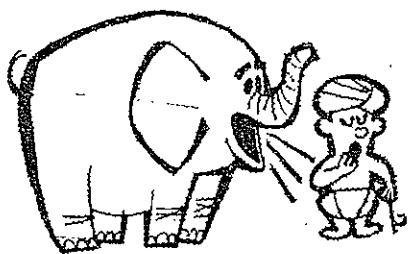
English: LOVESICK REPORTER



Thinklish: YEARNALIST

DAVID PAUL MARYLAND

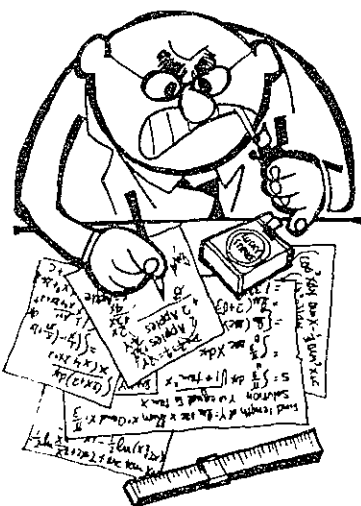
English: TALKATIVE ELEPHANT



Thinklish: YAKYDERM

JUDY Sisson, U OF WASHINGTON

English: ANGRY ALGEBRA TEACHER



Thinklish translation: This fellow reads nothing but the phone book (numbers only). The only music he likes is logarithm—the only dessert he'll eat is pi. When it comes to smoking, he's 100% for Luckies. Enjoying the honest taste of fine tobacco, he's a fairly agreeable fellow. But the second he misplaces a decimal (or his Luckies), his ire multiplies. Label him *wrathematician*... you've got his number!

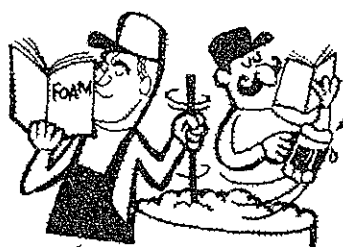
English: AQUATIC SPORTS ARENA



Thinklish: SWIMNASIUM

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English: BREWERY TRADE MAGAZINE



Thinklish: BUBBPLICATION

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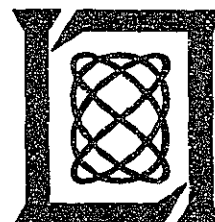
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Lecturer General Sir John Bagot Glubb Telescopes Middle East

By Cy Todd

Recognized to be the world's foremost expert on the Middle East, General Sir John Bagot Glubb was lecturer for Tuesday night's LSC program in Kresge Auditorium.

The General chose to divide his talk into three parts: the importance of the Middle East, its history, and the Middle East situation today. Beginning with the importance of the Middle East as part of a vital trade route between East and West, General Glubb stressed the awkward position of Britain, a small, overpopulated, poorly situated island. Since trade is the only means of her sustenance, the Middle East is a serious matter to Britain.

Also brought up under this first topic was the historically strategic position of the Middle East. General Glubb pointed out that any strong power in control of the Middle East could effectively divide the world in two, cutting off the West from the East by simply blocking the trade route.

Today, the vast oil fields of Arabia are vitally important to the West. Again, any power in control of the Middle East need only cut off access to this oil to paralyze the West.

General Glubb recalled that a small force of British stationed in Egypt during 1941 fought the Germans and Italians in North Africa, Greece, Abyssinia, and Jordan and made contact with the Russians in Iraq.

Long ago, the British recognized they had to be friendly with the ruling power to insure clear passage through the Suez canal. Until 1915, this concerned the Turks as the Middle East was part of the Ottoman Empire. When the Turks allied with the Germans in WWI the British negotiated with the Arabs outside Turkey to drive out the Turks and unite the Middle East as one great Arab state.

Although an agreement was reached and the Turks driven out, it was only until WWII that the Arabs reached any degree of independence and then only as many states. On top of this, the Balfour Declaration of 1917 concerning the establishment of Palestine was carried out by the British and led to the final statehood of Israel in 1948. All this convinced the Arabs they were betrayed. They believed the British to be cleverly plotting all this for some ulterior motive when actually, the General sardonically added, had only made "a frightful muddle of the whole business."

The General concluded the lecture with a rundown and evaluation of recent events. This included Nassar's rise to power, Egypt's agreements with Russia to receive arms, and revolutions in the northern Arab states.

Significant in these revolutions, the General observed, was the replacement of an older leader, say in his seventies, with a younger man of about forty. The General feels this is symbolic of the younger European-educated people revolting against the older people of classical Middle Eastern ideas. Certainly there is a larger number of educated people in these countries today, people that have been exposed to the Western culture and want to emulate it.

In this revolution of the young people of the Middle East, General Glubb finds fault with the foreign policies of the United States and Britain. He feels these countries are too ready to make agreements with the existing governments and do not consider the future of the young people with respect to these governments and agreements.

As for outside influences on the Middle East, the General finds especially significant the ability of one government to appeal to the mass of another government's people, using today's modern means of communication. This procedure has allowed Russia to obtain a foothold in the Middle East and, consequently cause much dissension between the Middle East and the West.

The General had several suggestions to gain the favor of the Middle Eastern powers or help peaceful relations at least. Firstly, the General states that any intimations of condescension toward the Arabs would earn their

undying hatred for they are a proud people. Secondly, the US should avoid "playing favorites" among the Arab countries for more than once we have been accused of setting one country against another. Thirdly, we should not disparage the nationalistic spirit in any of these countries. To do so would be hypocritical for we were conceived in nationalism ourselves. Lastly, we should try to produce a clearer and more worthwhile picture of the future between ourselves and the Arabs. This, the General finished, would enable us to join together in a really worthy cause.

General Glubb served in the British Army for 12 years. Then, in 1926, he resigned his commission to become an administrative inspector for the Iraqi government. From 1939 to 1956, he served as the commander in chief of the Arab Legion. He retired in 1956 and was knighted by the Queen of England for his services.

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No. 15

ACROSS

1. Delaying actions, in the paddock?

7. Titled Turks

13. Kools refresh your

14. Traffic in exchange students

15. A sitting duck for Drake

16. Niftier

17. Jumbo car pool

18. Guys without gals

20. Pride of the pregnant perch

21. Crossword bird

22. Suns

23. Tongue-lashings

26. Un-comphy horse

27. Kipling poem

29. Confronter

33. Kool your steady smoke

36. On the _____

38. Part of a church

39. Europe in World War II

40. Kind of berry blonde

42. Make the crew

43. Selection

45. Ruseet, gas or Mickey

47. Hot under-place

48. Nook, not necessarily for necking

49. They're not liabilities

50. Pelted

DOWN

1. Wild guess

2. Kind of way on the road

3. Weapons used in smooching

4. Mauna

5. They're made for lasses

6. Ohio, Penn or Michigan

7. Kool's Willie

8. Heave-hoes a steady

9. Saratoga, for instance

10. Jalopy's successor

11. Small space in a plant

12. Extra attention

19. Small amount

22. French novelist

24. British fly-boys

25. World's most thoroughly tested (pl.)

28. Remote

30. Buy Kools by the _____

31. Come about gradually

32. Clear the lawn again

38. Pilgrimage place

34. One of Dumas' Big Three

35. Refreshing cigarettes made

37. Kind of boy

40. Cry of acrophobes

41. Handle for Whitman

44. French island

46. Corporal or sergeant (abbr.)

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Dr. Sheehan Will Be Honored For Work On Penicillin And Peptides

By Dave Nickles

One of the major contributions to organic chemistry and medical research was made two years ago, when Dr. John C. Sheehan, a professor of organic chemistry, and his associates were successful in producing a method for synthesizing penicillin. Prior to this time, many scientists believed the synthesis of penicillin to be as impossible as trisecting an angle. Although the penicillin molecule is not complex (in fact it is similar to quinine and sucrose, both of which have been artificially produced), it is unstable and will break down if the usual methods of the organic chemistry laboratory are used.

During World War II, the American and British governments initiated a crash program to determine the structure of the penicillin molecule and to synthesize it for military uses. Although a thousand chemists were involved at a cost of \$20 million, the program was only partially successful. The structure method for its synthesis was produced.

In 1948, aided by graduate and post-doctorate students, Dr. Sheehan undertook this problem of synthesizing penicillin. He felt that it was a challenge which would benefit both scientific and humanitarian endeavors. In 1957 this goal was reached when ten varieties of penicillin were produced. New methods and techniques had to be evolved, utilizing reactions which occurred at or below room temperature. The last ten steps were the most critical, especially the final one which involved the closing of an amide bond in a four member ring. Penicillin V, one of the most important varieties of this antibiotic since it is administered orally, was produced in this manner. Although synthetic penicillin will probably never be able to compete economically with that produced by fermentation, its future lies with the new varieties which cannot be produced by the regular fermentation process.

Dr. Sheehan first became interested in the field of organic chemistry when he took a course in it while he was an undergraduate at Battle Creek College. To him "it seemed to have the right combination of art and exactness." Then he went on to study at the graduate school of the University of Michigan, where he received his M.S. and Ph.D. He remained there as a research associate until 1941, when he joined the staff of the Merck Laboratory. In 1946, after five years in industry, Dr. Sheehan joined the MIT chemistry department. He, his wife, and children now live in the suburb of Lexington.

Although Dr. Sheehan and his associates will continue in their study of penicillin, they are now investigating the structure of other antibiotics. Two substances which have recently been under investigation are etamicyn, a complex peptide, and tereic acid, which is derived from organisms found in soil. These peptides are similar to protein, except for the number of amino acids involved. Instead of using the usual laboratory methods using high temperatures, anhydrous solvents, and corrosive reagents, Dr. Sheehan devised methods involving aqueous so-

lutions, moderate temperatures, and neutral reagents. In this way, the conditions of the natural life processes are more closely approached. Thus if peptides can be synthesized in this way, scientists will have a better knowledge of the more complex protein molecule.

In April, when the American Chemical Society meets in Boston, Dr. Sheehan will be honored for his work on penicillin and peptides when he receives the \$1,000 A.C.S. Award for Creative Work in Organic Chemistry.

Due to the Washington's Birthday Holiday on February 23, "The Tech" will not publish on Tuesday, February 24. The next issue will appear on Friday, February 27. Happy weekend.

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Results of Chess Club Tournament

Results are now available for the MIT Chess Club's rapid transit tournament which was held last Saturday in room 1-132. It was a round-robin tournament with 15 seconds per move. The winners were: Carl Wagner '61 and Larry Wagner '60, tied for first and second; and Andrew Browder (grad.) third.

Saturday afternoon, Feb. 28 the club will play the Boston high school all-stars in a 20 board team match. If anyone is interested in playing in this match they should sign up at the regular club meeting, Wed. at 5:00 p.m. in room 1-132.

The Mass. Open Chess Championship will be held in Boston during the week-end of Feb. 21. Anyone that is interested should contact Larry Wagner, Baker 215, for details.

IM Hockey Season Nears End Third Annual B-Brawl Tomorrow Evening Grad House Tops List of Finalists Faculty Cagers Set To Provide Laughs

During the past week, the Intramural Hockey competition was narrowed to four teams. Surviving the rigors of playoff competition were Graduate House, Phi Beta Epsilon, Sigma Nu and Theta Delta Chi.

Last Sunday evening saw Sigma Nu overpower Delta Tau Delta 8-1. Led by the brilliant skating of Bob Hodges '60, the Snakes tallied five times in the first period to build up a commanding 5-1 lead. Hodges scored three goals and was credited with assists on the other two.

In the other Sunday encounter, Theta Delta Chi defeated Phi Gamma Delta 7-1. Starting the action was Theta Delta Chi's Bill Ross '59 who slipped in a loose puck in front of the Fiji goal, for the first of his three tallies. On the following face-off, the Fiji's Chuck Campbell '61 broke away, outskated the defensemen and rammed home a low corner shot past the virtually helpless goal tender. Just before the stanza ended Theta Delta Chi tallied again to make the count 2-1.

The second period was all the victors as they scored four times, while shutting out their opponents, to clinch the win.

Monday evening, Sigma Nu, with goals by Hodges and Joe Skenderian '61 shut out the Phi Gams 2-0. The other contest found Phi Beta Epsilon victorious over Phi Delta Theta in overtime by a score of 4-3.

Aaker Faces PBE Win

Dave Aaker '60 of Phi Beta Epsilon led all players with four goals as he accounted for all of the victors' scoring. Exhibiting tremendous speed and excellent stickhandling, Aaker threaded the Phi Delt defense for two markers in the first period. Not out by a long shot the Phi Delt's bounced back with three goals in the next session. It was Bard Glenn who stole the show here, as he scored twice and assisted on the third.

Down 3-2 with less than half the final period remaining, the Phi Betas called on Aaker who was equal to the occasion as he scored the tying marker. Time subsequently ran out necessitating the overtime. After thirty minutes of overtime play had elapsed, Aaker stole the puck and skated in unchecked for the game ending tally.

The following evening, Theta Delta Chi shut out Burton House 4-0, as Allen Starr '60 paced the attack with two tallies. Rounding out the quarterfinals was a contest between last year's runner-up Grad House and Delta Tau Delta. Chuck Hughes ably took charge of the situation as he crashed the nets on five different occasions to lead the Grads to a 7-1 victory over the Delt's.

Semi-final action began last evening as Phi Beta Epsilon encountered the favored Graduate House.

Tomorrow night holds the annual Basketball game at 7:45 in Rockwell Cage. Engineering and Administration squares off against the Science and Humanities team, attempting to redeem themselves after losing to the S & H team in the two previous games. Harkening back in history and hoping that history repeats itself the rumored cry of the engineers and administrators is "Damn the physicists, full steam ahead." Dissected in 1957 the Engineers and Administrators lost 39-5 to S & H, but last year they improved considerably losing by a score of only 34-22.5. (They collected the

2.5 points with a magnificent play after the whistle had blown ending the period.)

Bedecked with colorful costumes the faculty with shenanagins befitting students have for the past two years brought peals of laughter from the stands and bottles of liniment from the coaches. Two years ago Dr. Killian refereed in his Osage Chief-tan's headdress. Last year Professor "Reddy Teddy" Wood sported a brandy keg, while "Sinusoidal Sam" Mason flopped about the court in his flippered feet and demonstrating the incompatibility of water and earth, broke his toe.

The game which will be broadcast by WTBS, will be divided into eight periods each two minutes long. All odd-numbered periods are to be played with five men on a side and even numbered periods with six men per team. However, for each foul committed in the last four periods the teams which are fouled get an extra man on the floor for that quarter. Each field goal counts 5 points and each foul shot 3 points. Keeping the players in line will be the experienced officials Deans John T. Rule and Frederick G. Fassett.

Returning for their third year of play for S & H will be such stalwarts as "Easy Uno" Ingard of parabolic shot fame, Gene Brown (Biology), "Rocky Stocky" Stockmeyer (chemistry), "Unnerving Irving"

Bartlett (Humanities) backed by second year men "Wild Bill" Greene (Humanities), Ed Herbert (Biology) and Colonel Brinkerhoff (ROTC). To keep their winning streak S & H drafted some newcomers into their solid club: C. M. Gray (Humanities), Roy Weinstein (Physics), Doc Den-nen (Geology) and Malcolm Strand-berg (Physics).

With new blood and experience balanced the Eng. and Adm. team is read to pounce on the cocky S & H. With three year men Gene, "The Stilt" Chamberlain (Admissions), Dean Bill "The Pipe" Spear, Dean Robert Holden, and "Murph" Murphy (Athletics) lending the experience and two year men Bob "Boom Boom" Cannon (Mechanical), Herbert Woodson (Electrical), and Richard Balch (Athletics) supporting E & A intends to stamp out S & H. The experienced ones have been training the eager first year men on E & A: Charles Meriam (Electrical), Fred McGarry (Mechanical), Holt Ashley (Astro & Aero), George Brown (Mechanical), Norm Dahl (Mechanical), and A. H. Nuttall (Mechanical).

After the first half of the faculty contest, Grad House A will meet either Sigma Alpha Epsilon or Burton House C for the Intramural championship. After the first half of this encounter, the faculty hoopsters will return, and the final half of the playoff will close the evening's program.

on deck

Friday	
Basketball at RPI	8:30 p.m.
Hockey with Bowdoin	7:30 p.m.
Saturday	
Basketball at Union	8:00 p.m.
Fencing with Columbia	2:00 p.m.
Hockey with Alumni	2:00 p.m.
Rifle at Coast Guard	8:00 a.m.
Swimming at Springfield	2:00 p.m.
Freshman Swimming at Army	2:00 p.m.
Track with Bates	1:15 p.m.
Wrestling at Dartmouth	2:00 p.m.

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MIT All-Sports Day Features Ten Events Here Next Saturday

One week from tomorrow, the MIT Athletic Association will hold Winter Sports Day, during which seven varsity and three freshman sporting events will be held on campus. There will be enough variety offered so that every Techman should find several events to suit his tastes as a spectator.

The first event of the afternoon will be the varsity and frosh indoor track meet with the University of New Hampshire which will begin at Rockwell Cage at 1:15.

At 2:00, four contests will begin. The varsity hockey team will face WPI on the Briggs Field Rink in their final appearance of the winter. The varsity squash aggregation will battle Adelphi on the courts at the Alumni Pool, the once-beaten rifle team shoots against Harvard at the range, and the freshman wrestlers will grapple perennially powerful Springfield in Rockwell Cage. Following the yearling match, the varsity matmen take on their Springfield counterparts who shut them out last year 34-0.

The first event of the evening will be the freshman basketball game with Springfield at 6:15 in the Cage. At 8:15, the varsity hoopsters will take the floor against the Teachers, looking to avenge last winter's 68-67 setback. One of the most exciting contests on the program will be the swimming meet with WPI at 7:00 at the Alumni Pool. The Beaver mermen are currently enjoying their finest season in a decade.

With such a full agenda, good weather and a large turnout of spectators will make the day a success.

Tech Fencers Lose To Harvard, 16-11

In the first New England match to have both foil and epee judged electrically, the varsity fencers dropped a 16-11 decision to Harvard Wednesday evening in the Walker Memorial Gymnasium. The encounter was closer than the score indicated as many of the individual duels were decided by one touch.

The Engineers were able to come out on top only in the foil competition which they won 5-4, as Barrie Shabel '59 and Jerry Yarbrough '60 took two matches apiece and Sherman Karp '60 one. The sabremen lost 7-2 and the epee squad was edged 5-4, despite pairs of wins by Joe Pedloskey '59 and Bill Julian '61. Columbia will be here tomorrow.

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